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LEADING ARTICLES

THE CHARCOT TYPE OF GRAVES' DISEASE.

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OMAHA, NEB.

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ONE of the most difficult things confronting us today is the differential diagnosis of functional and organic diseases, and this difficulty is increased when there is a doubt in our minds as to whether the disease is purely functional or is dependent upon anatomical change. One condition which presents this difficulty to the fullest extent is exophthalmic goitre. This condition was described practically simultaneously by Graves, Basedow and Parry, and, is a condition almost universally diagnosed, and now it is generally recognized that it is dependent upon some definite disorder of the thyroid gland.

There are a large number of cases, however, which present many of the symptom of a typical Graves' disease, but without the striking condition which leads us so easily to a diagnosis.

Charcot and Marie deserve credit for calling our attention to this form, which they call "Formes Frustes." Trosseau also mentions these cases in the following words: "I believe exophthalmic goitre may exist in a still more undeveloped condition, and that the disease may be foreseen, and does really exist, in a great number of instances, without there being exophthalmos, bronchocele, or extreme frequency of the pulse."

Staley, of Freeport, Illinois, recently reported over 200 cases of this form of Graves' disease, which he had seen in consultant practice himself, most of which had not been diagnosed.

For a long time, the etiologic theories of Graves' disease were numerous and uncertain, but within the last few years, since we are better able to understand the functions and secretions of the ductless glands, it has been practically universally accepted that Graves' disease is due to an increased or perverted secretion of the thyroid gland. This internal secretion has some definite function in metabolism, and its total absence produces a condition of myxedema.

The work, which has been done by Möbius, Lantz, Blake and others in experiment and clinic have practically substantiated this theory, and have lead to the belief that sooner or later biological chemistry will produce a curative agent for this class of cases.

Thompson, however, in a recent article is inclined to deny this theory and to go back to the old idea of a lesion of the sympathetic nervous system.

The chief point of differentiation between a typical case and the Charcot type is the absence of the exophthalmos, and the frequency with which in the latter the gland is but little, if any, enlarged. In other words, of the four cardinal symptoms, exophthalmos, goitre, tachycardia and tremor, the later two are the ones upon which we must place the most reliance; but in addition to these four cardinal symptoms, we have many symptoms of less frequency and less importance, which may serve to properly direct our attention. Thompson gives the best analysis of the symptoms, and he describes some twenty which may occur. Palpitation and cardiac pain, various pareses, mental symptoms: emotionalism, depression and even mania; pain which may be either general or localized in certain portions of the extremities. Headaches, vertigo, paraesthesia, bulimia and other functional disorders of the stomach, diarrhea, insomnia, loss of hair, increased pigmentation of the skin, itching, sweating, vesical irritability. One other point made by Thompson is very valuable in diagnosing the case. He says that careful inquiry will show

that all symptoms are worse in the morning with an improvement beginning at a definite hour in the afternoon.

Before analyzing in detail the symptoms which are present in a series of cases, I would like to present a composite picture of these cases as they are seen in practice.

A girl in the early twenties who, from her history, has suffered with a mild chlorosis during her teens, and probably has had more or less menstrual disturbance, becomes nervous, has some perversion of appetite and complains of palpitation. She is emotional, irritable, has days or weeks during which she feels comparatively well, and at other times feels sufficiently ill to stay in bed, or at least lie around on the lounge. She presents the almost typical appearance of functional disease in that she is too tired to do even the simplest duties, but feels well enough to stand any amount of exertion when it leads to pleasure.

She usually is a brilliant girl, who has done very well in school, and inquiry will usually disclose the fact that there is a history of simple goitre somewhere in her female relatives.

Upon examination, you will find a girl who is of good figure and looks bright and well, but a hemoglobin estimation will usually disclose the presence of a mild anemia. Upon careful examination of the neck, you will discover a small goitre, which probably has not attracted her attention, on account of the very slight enlargement. A fine tremor is usually apparent, at once, upon asking the patient to stretch her fingers, although occasionally the tremor is seen only when several sets of muscles are put on tension.

An examination of the circulatory apparatus shows a heart normal in size, though the apex may be heaving and the entire precordia may show the heart wave. The first sound of the heart is quick, short, sharp and ringing and one or the other of the second sounds may be accentuated. The pulse count shows a rapid heart, running usually in the neighborhood of 110. Tremor, rapid pulse and soft goitre are enough to cause an inquiry into the other symptoms, and usually on careful analysis, you will find associated with these three main points, several of the subsidiary symptoms, above mentioned, such as sweating, diarrhea, paraesthesia, etc. More striking still are the results of the careful inquiry into the mental attitude of the patient, which discloses an emotionalism all out of proportion to the other conditions present.

All of these conditions do not occur in each and every case, but certain combinations of them is found in each case, and the main point to be particularly noted, is that this combination persists throughout the course of the disease. By this, I mean, that there is not the shifting and changing and variation in the symptoms complained of from day to day, as in many of the functional diseases, but when a series of symptoms exist in a case, inquiry will show that they have been present almost from the beginning of the illness, and that they will persist throughout the course of the disease, until the case is either cured or becomes a chronic invalid.

The most prominent symptom is the complaint of heart trouble, and I can do no better than to quote Miller in what he says referring to this condition. "And from my own experience I may say that nearly a third of all cases of so-called nervous palpitation belong to this disease, viz., hyperthryoidism. Here I do not mean the fully developed cases of exophthalmic goitre, but those far more frequent cases of incomplete hyperthyroidism where only the cardiac symptoms are very prominent, and where other symptoms seldom or never attract the attention of either the patient or physician. The "Kropfherz" (Fr. Kraus)or hyperthyroid heart can be distinguished from the nervous cardiac affections by the fact that the high pulse rate lasts throughout the whole day and night, and is not due to reflex action alone. The acceleration in most cases of goitre is not excessively great, 90 to 120, not nearly as high as in paroxysmal tachycardia, but high enough to trouble the patient constantly and to make him unfit for all continued work. This effect is due especially to the fact that palpitation is very pronounced. It is worth mentioning that in the hyperthyroid heart as well as in fully developed exophthalmic goitre, the increased pulsation is especially felt over the region of the right ventricle, that is, along the border of the sternum as high as the second interspace, and at the autopsy in cases of exophthalmic goitre, I have observed that there was present a marked hypertrophy and dilatation, especially of the right ventricle, and an excessive congestion of the pulmonary vessels."

The study of the goitre in these cases is interesting, because we find such a variation in the size of the gland. Many of these cases start in an individual, who has had a simple goitre for several years. Frequently, this goitre has been subjected to treatment, in which the iodides have played a part, and we then see the rapid development of all of the other symptoms on top of a goitre, which at the beginning, has been nothing more than a cosmetic defect.

The usual form of goitre, however, is a soft diffuse vascular enlargement of the gland, which may be so masked under the

fatty development at the base of the neck as to escape notice, except under the most careful examination. A few enlarged veins running across the base of the neck have, on several occasions, called my attention to the possibility of a vascular goitre, which was found on careful search.

Another point to be remembered is that aberrant thryoids are not uncommon, and the gland may be found any where in the neck, or even under the sternum, but even if no enlargement of the gland can be demonstrated, it does not necessarily eclude the possibility of our having a case of the Charcot type. Müller in the article previously quoted puts this idea very concisely: "Yet we sometimes see cases which show every characteristic of hyperthyroidism, though no enlargement of the gland is present. As we may suspect kidney disease when no definite signs are apparent, so may we believe that a morbid state of thyroid can exist without any apparent enlargement or diminution in the size of the organ."

The tremor which after all is the most characteristic symptom is fine, rapid, but is interrupted frequently by greater movements of the fingers, which remind one of a finger striking at a piano key. This tremor usually can be elicited by simply extending the fingers of one hand, and is increased in extent the greater the number of muscles are put on stretch. Thus, when it is doubtful if the tremor exists, have the patient extend both hands, at the same time putting out the tongue, and the tremor will be seen in all the fingers, the tongue, lips and even in the muscles of the head.

As explained in a previous paragraph, the present theory of the production of the disease, is that it is due to a preverted or excessive secretion of the thyroid gland.

Having watched many of these cases for months and years of their course, I have never seen a single case change from the "Formes Frustes" to a typical form, and it has occurred to me that perhaps we might find the explanation on further experimentation in that the typical form is due to the increased secretion, while the minor form is due to a perverted secretion or vice versa.

In differential diagnosis, we must first consider the protean neurasthenia and its twin brother, spastic constipation. Many of the external manifestations are very much alike, and a definite diagnosis seems difficult, but when we hold fast to a conception embracing the main symptoms of Graves' disease, and have in addition a combination of the subsidiary symptoms, we will pick these cases from the mass of neurasthenics without any difficulty. Usually if we consider the persistent type of symptoms with Graves' disease and remember the variations of symptomatology from week to week with the other, we have a firm point of differentiation.

Another condition enters prominently into the question of differential diagnosis. I refer to pulmonary tuberculosis, which may present itself in a young girl of this age, with many, if not all of the symptoms above mentioned, and with little if any demonstrable signs in the lungs. The tachycardia, the sweating, the fatigue, are, of course, prominent symptoms of incipient phthisis. The differential diagnosis must be made here on a basis of a physical examination, repeated frequently, if necessary, and accurate observations of the temperature. This should lead in the course of a few weeks to the proper diagnosis, but I might mention parenthetically that I have found the two conditions coexisting at times.

Of course, when it comes to the differentiation between true Graves' disease and the Charcot type, the exophthalmos and the goitre are the main points.

Before discussing the treatment of this condition, it is well to provide ourselves with a possible prophylaxis. In a condition as widespread as this, we can each do a little perhaps to prevent the development of this class of cases. Not enough attention is paid to the physical condition of girls passing through the age of puberty, and we are inclined to neglect the anemias and the digestive disorders of this period of life, perhaps considering them a necessary incident rather than a definite disease. If, however, we would pay more attention to minor symptoms between the ages of thirteen and eighteen, I feel sure that we would have less frequently to treat not only Graves' disease, but many other forms of similar disease in these girls as they grow older.

Constipation, anemia, palpitation, emotionalism, occurring in a girl requires a most thorough investigation as to its cause, and furthermore, requires constant treatment, not only during the time when the symptom is treated, but in many instances, for months and years afterwards.

There is no question in my mind that the forced educational system so prevalent in America is responsible for many of these cases, and in addition to the ordinary measures of treatment in the above mentioned conditions, it is very frequently necessary to demand a limitation of the school work, or perhaps a year's vacation will be required.

Another point in prophylaxis, which deserves more attention than it receives is the fact that goitre districts exist not only in Switzerland, but also in many places in our

own neighborhood. I know of two or three such localities in Western Iowa, where a large proportion of the school girls have a simple goitre.

This is also a family characteristic, and in many families we find that several, if not all, of the female members of a given family have goitre. In such a family, or in such a locality, we must remember never to use iodides in any form in the treatment of any condition, as it is a well established fact that the administration of a single dose of iodide or a single application of iodine may change a simple goitre into a Graves' disease, or may bring about many of the symptoms above described, even when there is no palpable goitre.

And also, any nervous manifetsations, whatever, occurring in these families or localities should lead to the most careful inquiry and examination to see if there is no possibility of the case being explainable on a basis of Graves' disease.

One has but to refer to any text-book and note the numerous drugs and the ill-assorted adjuvant treatment to realize that at the present day, we have no definite specific treatment for this condition. A careful plan of treatment will frequently bring about results as gratifying as can be expected, but at the same time, many cases of this form resist all treatment and persist year in and year out.

We hope that with the abundant work at present being done in the various physiological laboratories, we will sooner or later have some form of serum treatment for this affection. It is undeniable that in certain cases of the typical Graves' disease have yielded to serums and specific treatment in the hands of great many different men, but from my own personal experience and observation, I have failed to find this definite reaction to any orm of specific treatment in cases of the Charcot type. By meeting certain general indications in these cases, however, a fair degree of success is assured and by adopting the following plan of treatment, I have been satisfied with the results.

Rest in bed is essential. This must be continued over a long period of time, not less than six weeks and frequently three months.

This enables us to control the emotionalism better than any other plan. Forced feeding is required, not alone because many of these cases are under weight, but also because it has been demonstrated that the nitrogenous equilibrium is not maintained in these cases unless there is a tremendous excess of caloric value in the food of these individuals. By that, I mean, that these cases will not maintain weight and strength on the 35 or 40 calories per day, per kilo of body weight, but we must force the intake up to 80 or 90 units to achieve results.

The vasomotor disturbance can be controlled in a certain measure by the warm sponge baths followed by a cold salt water rub each morning. Mild galvanism administered along the sympathetic in the neck enables us in a measure to control the rapidity of the heart and perhaps is a valuable means of suggestive therapeutics.

When we wish to discuss the drug treatment, we can simply say that all forms of ordinary heart tonics and stimulants are absolutely out of the question in these cases. In fact, digitalis, strychnine and caffein, each representing a different class of cardiac drugs, aggravate the condition rather than help it. The only combination of drugs that I have ever seen that will produce effects is the combination used for many years by Kraft Ebing. This is a combination of equal parts of extract of ergot and citrate of iron and quinine, one to five grains of each being given three times a day. Under the influence of this combination, I have seen improvement in many cases.

By adopting a definite line of treatment, as above outlined, we will have a fair proportion of permanent cures. In those whom we are not successful, we would at least control many of the annoying symptoms and tide the patient over for the short time intervening between the present and the near future, when we hope a definite curative serum will be available. One cannot deny that if all surgeons could report the same success, as Kocher, that is, only two deaths in 153 cases, that we would more frequently recommend operative procedure incomplete cases, but to my mind these incomplete cases do not present the proper indications for operation.

In looking up my records, I find notes of 27 cases, 6 representing the complete type and 21 the Charcot type. In the complete cases were one male and five females, among the others two males and nineteen femles. This is about the proportion of the cases usually reported.

Speaking only of the principal symptoms; all of the complete case presented an enlarged thyroid; of the nineteen Charcot the cases, enlarged thyroid was absent in six cases.

The pulse taking all the cases together was: 90 to 100 in 8 cases; 100 to 110 in 6 cases; 110 to 120 in 7 cases; 120 to 130 in 3 cases, and more than 130 in 3 cases.

Tremor existed in all the cases.

Thomposn's sypmtom of feeling better in the atfernoon was inquired into in 12 cases. It was present in 10 cases, doubtful in one and one case only felt better in the morning.

In three cases, the iodide had had a definite influence is causing the disease.

Of the six cases of the complete type, two cases were cured by operation, one case completely cured by the Lanz goat milk treatment. Two case relieved of all symptoms save those due to the hypertrophied heart, by the same treatment. Two cases died suddenly. In one case of the incomplete type, all symptoms stopped after cleaning out the uterus after an incomplete abortion.

Continental Building.

THE MOST RAPID, EFFECTIVE AND LEAST BLOODY METHOD OF TURBINAL REMOVAL.

C. C. MILLER, M. D.

CHICAGO.

In this article I wish to briefly outline the advantages of crushing forceps in the removal of more or less of the inferior or middle turbinate bones.

It is generally conceded that the removal of either of these bones in its entirety is unnecessary if not actually undesirable or inadvisable. Not a few practitioners of limited surgical experience hesitate to attempt removal of the turbinates with the saw, yet hypertrophies are exceedingly common, and unless such tissues are removed by surgical means, the patient suffering such obstructive condition is likely to continue to suffer in spite of any medicinal treatment directed toward the relief of the condition.

The saw and snare have probably been the instruments most generally used in turbinal removal, if the cautery be excluded. With not a few specialists, cauterization will continue to be the method of election in the treatment of many hypertrophies, as it presents an advantage in not causing bleeding at the time of operation. Cauterization is inadvisable in the treatment of hypertrophies of the mucosa alone in quite a percentage of cases, as healing is likely to follow of the cauterized area of the turbinate to the septum, a result which is undesirable in any case.

I have illustrated this article by a demonstration with ordinary six inch hemostats, which have rather long jaws, as I have found such quite as effective as special angular clamps. Every practitioner is the possessor of hemostats, and any hemostat or clamp may be used in the removal of a turbinal if its jaws be not too bulky to permit of the hypertrophy being engaged within the jaws of the forceps.

Before operating the mucosa should be cocainized. This may be effectually accomplished with gauze or cotton saturated in a

FIG. 1.—The forceps have been passed and locked upon the anterior portion of the inferior turbinate.

two percent solution of cocain. A strip of gauze or cotton saturated in the cocain solution should be packed snugly beneath the hypertrophy. Other strips should be packed around and above the hypertrophy. These strips should be left in place from seven to ten minutes. Any solution draining into the pharynx should be expectorated and not swallowed. Cocainized mucosa is pale. Usually a nasal speculum is convenient in

FIG. 2.—The forceps rotated in a semicircle twisting off the hypertrophy. When the forceps have been rotated until the fragment within the grasp of the jaws is entirely free the forceps are withdrawn.

passing the forceps, and in the accurate placing of the jaws of the forceps above and below the hypertrophy. When the jaws are in place they should be locked as tightly as possible. The forceps should be rotated. They should not be pulled upon until they have been freed from the base of the turbinate b

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rotation. When the forceps are rotated, the bone snaps cleanly close along the margin of the jaws of the forceps, and the soft parts give way within the grasp of the forceps, so that vessels running into the hypertrophy are left in large part sealed, and bleeding is less than where saw or scissors are used.

No attempt should be made to withdraw the forceps from the nose until it is plain from the freedom with which they rotate that they are no longer attached to the base of the turbinate.

Locking, rotating and withdrawing the forceps is but the work of a few seconds. It is unnecesasary to attempt the removal of a

FIG. 3.—Manner of tilting the head of the patient to permit of the easy passing of the forceps upward to grasp the margin of the middle turbinate.

large portion of the turbinate at a single bite, as the process may be repeated a number of times, bleeding usually being so slow as not to inconvenience the repeated accurate placing of the forceps. Even where a turbinate is removed piece meal it is surprising how expediently it may be removed. A half dozen bites may be taken without haste within the period of a minute and the nose be smoothly cleared to just that degree desired by the operator.

For quick, effective, accurate work with the least amount of hemorrhage, I recommend the clamp to the practitioner, and turbinal removal which is usually looked upon a rather difficult and uncertain operation by the practitioner of limited experience, becomes amazingly simple when the technic outlined is followed.

A special clamp forceps with an angle is a convenience to the operator as its drops the hand below the line of vision, but it is by no means essential.

No snare can compare with a light strong clamp for clearing the nose of multiple polypoid growths.

70 State street.

CEREBROSPINAL FEVER — EPIDEMIC CEREBROSPINAL MENINGITIS; SPOTTED FEVER; PETECHIAL FEVER.*

T. G. STEPHENS, M. D., PH. D.

SIDNEY, IOWA.

CEREBROSPINAL FEVER is a species of microbic infection occurring sporadically and in epidemics; is of modern recognition and on its westward march was first seen on this side of the Atlantic in 1806. Children and young adults are much the most frequent victims. With age the susceptibility descends, although a few isolated cases are mentioned during decrepitude.

In the malignant form at the onset there is drowsiness with chills, intense headache, somnolence, muscular pains, great depression, moderate elevation of temperature, and feeble pulse which may descend to sixty or fifty per minute. In the ordinary form during the stage of incubation the pulse is full and an early and important symptom is a painful stiffness of the neck. A notable characteristic of cerebrospinal fever is the eruption which is present in about fifty per cent of the cases, and is of two kinds, herpetic and petechial. The cutaneous symptoms of the lips, herpes labialis and herpes facialis, as well as vomiting, are first symptoms. In cases more advanced I have met with other eruptions as erythema, urticaria, sudamina and rose colored eruptions, the latter so-called from their resemblance to flea bites which occur spontaneously upon the skin in the course of severe diseases, and are signs of great prostration.

The symptoms of the epidemic of spotted fever on the whole are similar to the idiopathic form, the headache being the most prominent, and the rigidity of the muscles of the neck rarely absent, but in the epidemic more frequent. Both armies in time of the Civil War in America suffered more or less from some form of cerebrospinal meningitis. During the winter and spring of 1863-4, when practically the science of bacteriology was little known, my practice extended over a radius of several miles, meeting with cases alone or in consultation quite often for months, and my opportunities for studying the disease were paramount to my colleagues, and my success for a time much better in the treatment of this serious disease. During this epidemic of petechial fever, using a synonym, I was called to a home where there was a family of eight prostrated from the prevailing epidemic. In arriving within one hundred paces of the house the shrieks and

*Read before the Tri-State Medical Society at Des Moines, Ia.

groans from pain, mostly of their heads, necks and backs, were quite audible. The next day I asked for counsel. I made a hard fight, saving all, except six, father and mother recovering. After this I did not have any better success than the other physicians.

Twenty-four hours after death, I made an autopsy on a lad six years old, one of the family, with the following findings: On removing the skull cap a quantity of serum and pus escaped, showing that the disease affected the convexity of the brain as well as the base. I found it most marked along the large vessels and in the fissures of the cortex. The cranial nerves, especially the auditory, were bathed in pus; the entire brain was in an inflammatory condition from slight hyperemia to intense congestion with injection of the pia-arachnoid; and finally a stage in which pus and fibrinous more particularly in connection with the gray matter of the brain was present. Placing the patient prone with a scalpel we laid open the whole length of the spinal canal, separating the muscles from the vetebral grooves so as to expose the spinal processes and laminae of the vertebra from the vertebral grooves, and the latter was sawed through on each side close to the roots of the transverse processes from the fourth crevical vertebra above to the sacrum. Then displacing the vertebral arches by means of a chisel and removing them, the dura mater was exposed as well as the arachnoid and pia mater. The spinal membrane was similarly affected to the extent of extravasation of the blood, the same condition was found as upon the meninges of the brain and were more prominent in the posterior aspect of the cord.

The symptoms of cerebrospinal fever do not present an unvarying picture in its symptomatology and to attempt to portray every unusual symptom would occupy undue space. Kernig of St. Petersburg, called attention to a symptom which is at times a valuable aid to diagnosis in meningitis where the spinal membranes are involved. It is tested for in the following way: The patient is propped up in bed in a sitting posture with the thighs flexed upon the abdomen and the legs partially flexed upon the thighs, a position commonly assumed by patients with prolonged spinal meningitis. An attempt is then made to extend the leg, when it will be found to be resisted by contraction of the flexor muscles preventing its full straightening. In the recubment position the leg can be straightened. When the patient cannot sit up in bed the thigh may be flexed upon the abdomen and then an attempt made to extend the leg, which again fails if meningitis be present.

Therapeutic measures in epidemic cerebrospinal meningitis has been unsatisfactory, the disease denoting an inaflmmatory condition of the arachnoid and piamater of both brain and spinal cord of great intensity. As might be expected in such a generalization of disease, spreading of the noxious agents by continuity and contiguity multiplying somewhere in the body, consequently even in this class of diseases it may be said that the morbid process has a local starting point or several seats. The various potential medicinal agents have without exception been futile, and we are compelled to acknowledge our inability to make a good showing in the cure of this form of infection on any scientific basis, and are compelled to treat it symptomatically and palliatively. If the hyperesthesia will admit, apply ice bags to the horns scalp; warm half baths may often be used with utility, this producing dilatation of the vascular canals of the skin and lessening the general hyperesthesia.

As to the treatment of the ordinary form of cerebrospinal fever we will only mention a few of the remedies that have been recommended. In this form of the affection the practitioner administering them as indicated, modifyng the dose to suit exigencies. To quiet pain morphine; veratrum when necessary to lower arterial action, and often with it excess of temperature; bromide of potassium has a very happy effect in quieting nervous excitement and unrest, but is contraindicated by an excessive irritability of the gastrointestinal mucous membrane, and bromide of sodium is a very efficient remedy in its place. For spasms or convulsions, chloral, if the stools are clay colored or too light pil. hydrarg.; in some cases where there seems to be obscurity iodide of potassium.

TUBERCULOSIS NOT ADMITTED.—The regents of the University of Utah have promulgated a decree that no teacher, student or employe infected with tuberculosis will be admitted hereafter to the class-rooms or buildings of the university.

DURING July 669 babies under one year of age died in Chicago. The Health Department is of the opinion that probably two-thirds of these deaths could have been avoided, and most of them may be attributed to ignorance and neglect of the parents. The department is now directing the work of seventy-five physicians in the crowded districts of the city in the line of education of mothers in the proper care of their children. It is reported that the most common is the overfeeding and the feeding of improper food.

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EDITORIAL

The Development of the Cystoscope.

ABOUT once in every decade the profession has its feelings harrowed up by what would be an infringement controversy were it not that the right of patent is looked upon as questionable in the fold. The latest and not the least bitter has been waged over the sheath-and-telescope cystoscope within the past year. Our readers have doubtless heard somewhat of its details. Dr. F. Tilden Brown, of New York, charged that Dr. Bransford Lewis, of St. Louis, had reproduced "his" composite cystoscope, and was exploiting it to the profession as the Bransford Lewis Universal Cystoscope. We have to confess that we were woefully lacking in information at the beginning of the controversy, and we applied to both Dr. Brown and Dr. Lewis for enlightenment; from Dr. Brown we got no satisfaction, but Dr. Lewis has assumed an attitude of wishing to assist the profession to definite facts, and to place himself in an unquestionable position. In his answer to Dr. Brown's charges, Dr. Lewis makes it perfectly plain that beyond increasing the effectiveness, by ingenious modifications and methods of assembling, the instrument is in no sense American, its essential parts being traced back to Boisseau du Rocher whose instrument was placed on the market in 1889. It seems somewhat regrettable that those who have been devising cystoscopes in this country have been so tardy in giving credit to Boisseau, but the weight of this criticism falls most heavily on the man who has laid such strenuous claim to originality as to charge another as Dr. Brown has done. It does not develop that Dr. Brown has made it his business to give credit to any of those through whose originality his instrument was made possible.

But the Brown "Composite" and the Lewis "Universal" are far from the same instrument, even though they do present many common features. Having been made by the same manufacturer there is a general similarity of set-screws, caps, etc.; it would seem that there had been no effort at a variation in these; other features common to both are not features of originality with either of the gentlemen, but are attributable rather to Boisseau and the pioneers in cystoscope construction. A close study of the two instruments leaves one filled with wonder that Dr. Brown could find anything on which to base his charge; radical differences are perfectly apparent. Dr. Lewis has never claimed originality in the cystoscope as a whole, but he has shown distinct originality in modifying certain features to increase their practical use, and in assembling his instrument; the result of his endeavors is an instrument which possesses advantageous features present in none other up to the time his cystoscope was put on the market (1906).

The distinctive features of the Bransford Lewis Universal Cystoscope which give it a definite individuality are (1) the double fenestration of the beak which permits the lamp being set upside-down, increasing the effectiveness of illumination, protecting the lamp and allowing a shortening of the telescope; and (2) the open catheter grooves in the place of the tubes and bridged grooves of other instruments. These two features are sufficient to give the instrument individuality and explain its reason for being.

The reasons for the controversy seem to have been largely founded in the manufacturer's partiality to one of his clients, and there has been hinted that there were geographical reasons also. Whatever reasons led to it, we of St. Louis and of the middle West must feel not a little satisfaction that Dr. Lewis has so ably defended himself, and so perfectly justified all claims that he has made.

"Torment Me Not."

A CONTRIBUTION that promises to be of no small value to current literature and human betterment has recently appeared under the title "Mind That Found Itself." It purports to be the autobiography of the author of the book, and internal and other evidences very fully confirm this view. It tells the story of a young man of highly-wrought, overstrained mentality obsessed by fears of impending evil, which culminated in a nearly successful attempt at self-destruction, following which other varying phenomena of madness developed covering a period

THE DEVELOPMENT OF THE CYSTOSCOPE.

(See opposite page)

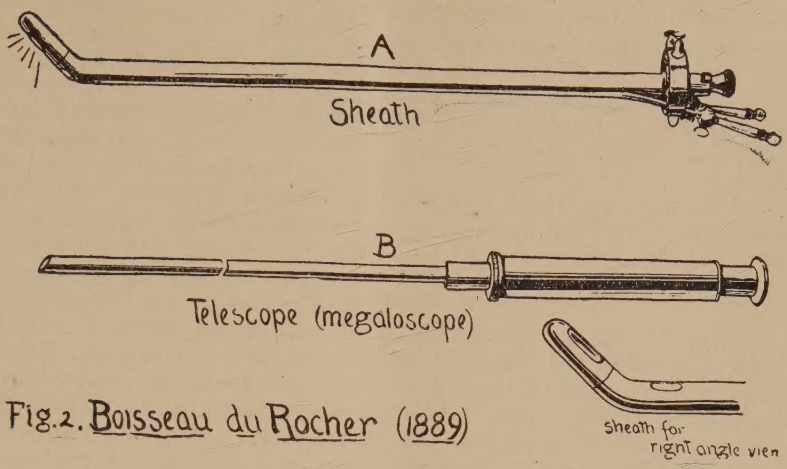

Fig. 2. Boisseau du Rocher (1889)

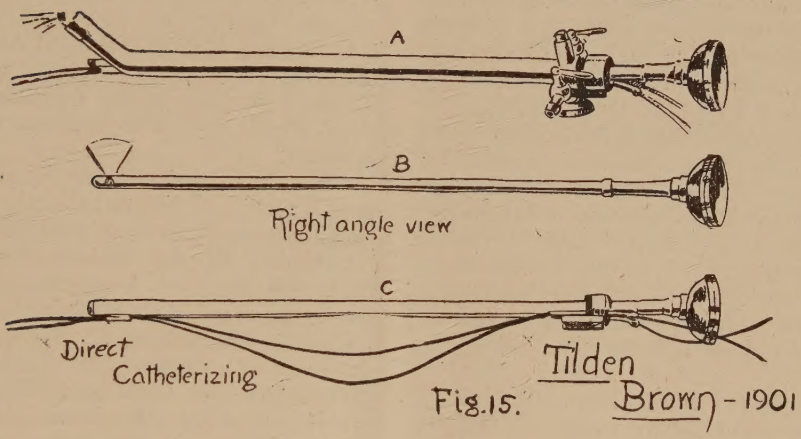

Fig. 15. Tilden Brown - 1901

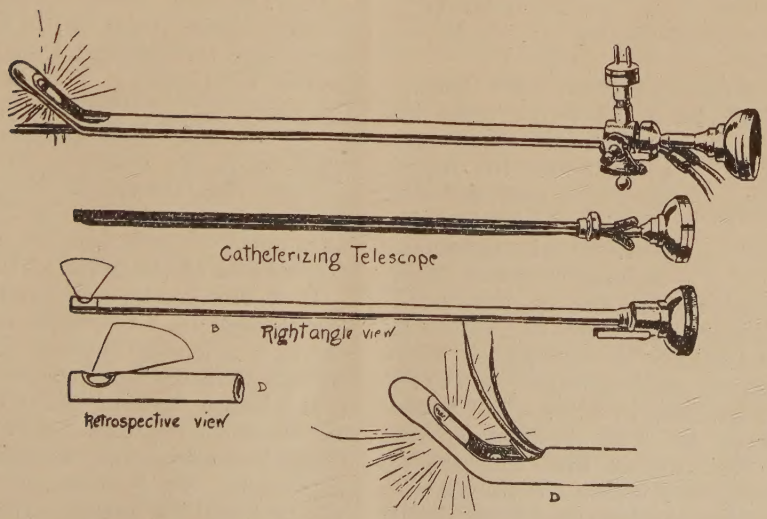

Fig. 16. Bransford Lewis Universal Cystoscope — 1906.

of years with, however, essential restoration to health.

The effects on these various stages of alienation by home care, treatment in a general hospital, and in a number of institutions for the insane, both public and private, are told in a manner that rivets attention; and the story is as a flashlight thrown from within on conditions and abuses that cry loud for correction.

The keynote of the work is stressed in the plea for non-restraint, and, the evils to all concerned that flow from a disregard of this humane principle are eloquently and forcibly pictured.

Likewise, the vicious effects of political partisanship and bossism in the conduct of public institutions for the care of the insane are dwelt upon, and the consequent impossibility of rendering satisfactory professional service which confronts those who are placed in charge of such hospitals.

While the book is not addressed to the medical profession there is no physician who will not be the better for having read it, and urging it upon the attention of the non-medical public with which he may be in touch.

A business man himself the author is now actively engaged in a business career, but through a sense of humanity aided by the gift of a true scientific spirit and a forceful literary style he has made a powerful plea in behalf of many thousands of unfortunates, whose miseries and wrongs have too often been voiceless, and which appeal cannot go unheeded among people who profess an advancing civilization.

Most fittingly the work closes with the impassioned prayer of the madman of Gadara: "I adjure thee by God, that thou torment me not."

G. H.

Where Medical Science Evolved.

THOSE of our readers who have been following Dr. R. G. Eccles in his tour around the world will have been pleased with the beginning of a new series in our last issue which, while shorter, promises to be of as great interest. A new interest in the beginnings of medicine is imparted by this description of present-day conditions in the places where the real fathers of medicine knew active life and did a work which in some of its phases was as effective as that done by modern physicians. We believe that our readers without exception will follow Dr. Eccles with profound attention and will feel more deeply their responsibilities after having been in touch with the beginnings.

Foreign Guests of the St. Louis Profession.

THE recently adjourned Tuberculosis Congress at Washington brought to America many authorities in different branches of this important work, a number of whom are touring the country before returning to Europe. It is the privilege of the St. Louis profession to have several of these gentlemen as guests. Dr. Wilhelm Karo of Professor Casper's clinic in Berlin, was the first to arrive. He addressed the St. Louis Medical Society at its meeting of October 10th, speaking on "Experiences with Tuberculosis of the Bladder." Dr. Karo spent several days in the city, during which time he gave clinics at various hospitals and was made accessible to the profession through a number of dinners and other functions. Prof. Clemens von Pirquet, of the von Pirquet Reaction for Tuberculosis fame, is one of Vienna's representatives in the country. He came to our city on the 17th as the guest of the Medical Society of City Hospital Alumni. A joint meeting was held with the St. Louis Medical Society on the evening of the 17th with Prof. von Pirquet as the principal speaker.

Dr. von Pirquet is a man of most pleasing personality and his familiarity with the English language was such that he seemed very much one of us. His address made very clear the detail of the technique of the cutaneous tuberculin reaction and the reasons for its general adoption in the question of the presence of tuberculosis. He gave a clinic at Washington University Hospital on the afternoon of the 19th, where he further demonstrated the process.

Prof. W. von Leube came to the city on the 20th as the guest of the Verein Deutscher Aertze and the Medical Department of Washington University. Von Leube comes from the University of Wuerzburg. On the evening of the 20th he delivered an address before the Verein, the students and faculty of the Medical Department of Washington University in Memorial Hall. In the large audience were many laymen who are interested in the eradication of the great white plague.

Prof. von Leube read a paper which treated the disease in a scientific manner. He said the only scientific method of dealing with tuberculosis is by isolation. A person who had a single symptom of tuberculosis should not be housed with one free from it. He laid special stress on the necessity of constructing public hospitals so that tuberculosis patients might be completely isolated from all others. Fresh air, plenty of it, cheerful surroundings, absolute cleanliness and the com-

bating of every unfavorable symptom were cited as the main hope of stamping out the disease.

ST. LOUIS ITEMS.

DR. VICTOR B. KIEFFER joined the benedicts on October 14. Congratulations.

DR. C. F. PFINGSTEN has lately returned from a two years work in the clinics and laboratories of Berlin and Vienna. Dr. Pfingsten has taken office suite Nos. 208-9 in the Lister Building.

DR. C. W. MCELHANEY, of Greenville, Pa., has been spending some weeks doing postgraduate work with local surgeons. He left on the evening of the 21st for Rochester, Minn., where he will spend a fortnight with the Mayos.

SEVERAL St. Louis physicians attended the meeting of the M. V. M. A. at Louisville, but not so large a delegation as the occasion merited. These October meetings come at a time when physicians are getting busy after their summer's vacation, and it is difficult to leave work when it is plenty. The British idea of midsummer gatherings seems to have its advantages.

A SPECIAL meeting of the St. Louis Medical Society will be held on the evening of October 29, at which time Dr. M. G. Mumford of Harvard University will read a paper on "Studies in Cancer—Historical and Critical." The discussion will be opened by Dr. G. W. Crile, of Cleveland. After the scientific program the remainder of the evening will be devoted to social and physical refreshment.

THE decoration of Mr. Frank Ruf, of the Antikamnia Chemical Co., by the Shah of Persia, demonstrates the wide popularity and great worth of that pleasing individual. The decoration comes not because the Shah is a user of antikamnia, but because Mr. Ruf is a rug fancier and has done not a little business with subjects of the Shah. Though now belonging to the Order of the Lion, Mr. Ruf still maintains a lamb-like disposition.

THE Department of Health of Chicago has sent out notices to physicians worded as follows: "The Department of Health suggests: Why not use tuberculin and diagnose your case of consumption now? Why wait until there is no hope? Which policy is best for your patient—for the community—for you? The department will give you the tuberculin."

MEDICAL PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

INTERNAL MEDICINE.

O. E. LADEMANN, M. D.

The Present Status of Experimental Arterial Disease.—Adler (Am Jour. of the Med. Scs., August, 1908) summarizes his article as follows: Arteriosclerosis or to use the better term, "atherosclerosis," may be designated as a morbid condition of the blood-vessels closely following and allied to the physiological process of development, growth, and senescence of the vascular system, and governed by the same laws. It may without exaggeration be said, that atherosclerosis, viewed as a disease, is merely the anticipation in time extent, and intensity of the normal "physiological" condition of senility. In physiological terms it may be expressed as an impairment or loss of elasticity and of functional adaptibility of the vessel walls. Pathologically it is a process of degeneration of the elastic and muscular elements of the vessel walls, associated with compensatory and reparative hyperplasias and hypertrophies principally of the connective tissue elements, and often tending to calcifications and ulcerative processes. The etiological factors that determine its earlier or latent onset, its localization, whether more general or more restricted to certain limited portions of the vascular system, and very probably also, at least in part, its histological structure, are manifold. Heredity and physiological overstrain (Abnuzung) in its numerous variations must certainly play an important part. It is most probable that bacterial and other infections and intoxications with organic as well as inorganic poisons are important etiological factors, and may possibly have considerable influence on the localization as well as on the histological type of the arteriosclerotic process. We are disposed to conceive atherosclerosis, therefore, as a clinical entity. The various types of vascular degeneration briefly mentioned above—the typical lesions in the aorta, the degeneration and calcification in the media of the pulmonary artery, and especially of the peripheral vessels—with all their sequels, are all gathered together into this one large group. They all have a common etiology and are closely allied in their physiological and pathological relations. From this point of view the recent experimental researches with adrenalin, nicotine and all other substances would seem to have a direct bearing on the problem of arteriosclerosis, inasmuch as they

appear to demonstrate the effect of toxins of various kinds upon the development of atherosclerotic lesions in the rabbit. They would also appear to go far towards establishing a most important fact, namely, the different kinds of toxic agents can produce lesions of different histological character (bacterial toxins on the one hand and the adrenalin group of poisons on the other). It must be confessed, however, that the element of uncertainty as to how much is due to experiment and how much is spontaneous and independent of all experimentation, which clings to all of these investigations, very seriously impairs the value of all this work and compels for the present, and until further investigation has cleared up these questions, a suspension of judgment, or at least a very guarded and provisional acceptance of these results. It may confidently be expected, however, that further research along similar lines, with a study of spontaneous atherosclerosis, especially in carnivorous animals, both wild and domesticated, and its comparison with the human, together with the experimental investigation of the effect of bacterial infection and of toxins on the animals besides rabbits, will materially assist in advancing our knowledge and throwing some light into much that is still very obscure.

Experimental Investigation into the Function of the Thymus.—MacLennan (Glasgow Med. Jour., August, 1908) bases the following conclusions upon experimental investigation: 1. The thymus may be a lymphatic gland, but it is so specialized as to be virtually something more; it is one of the series of glands which by an internal secretion regulate the various functions of the body. 2. The gland is really an accessory one for its function can be taken up by others. Simultaneous extirpation of the spleen and thymus invariably results in death. One would infer, therefore, that along with its other manifold functions the spleen can carry on those of the temporary thymus. Extirpation of the thymus does not give rise to the hypertrophy of adenoid tissue elsewhere. 3. The function of the gland is temporary, for as growth advances the gland atrophies, though in man it never quite disappears till after puberty. There are cases on record, however, in which there has been no thymus. 4. The thymus and thyroid are closely associated developmentally, anatomically, physiologically and pathologically. The results of experiments have shown that the thymus is unnecessary to the economy when the thyroid is gone, and when the thymus is removed less thyroid suffices. The importance of this relationship is apparent in certain diseases. An enlarged thymus is credited, rightly in some cases, with being the cause of death in the so-called status lymphaticus, and after the removal of the thyroid the enlarged thymus gives rise to the same conditions as produce the so-called thymus death. Therefore, when thyroidectomy is deemed necessary in exophthalmic goiter the author recommends that the thymus be first sought for, and, if found enlarged, removed as a preliminary to the thyroidectomy. 5. In certain other diseases, notably laryngismus stridulus, thymusectomy has given good results. The result of the extirpation is not mechanical, but due to the removal of the internal secretion of the thymus. In this disease thymusectomy offers some hope of cure. In cretins, thymusectomy, by reducing the necessity of thyroid secretion, will be beneficent, and ought to be tried. 6. In children who present a fulness over suprasternal notch during expiration, straining or coughing, special care ought to be taken during surgical anesthesia, which ought to be of the lightest possible.

The Blood Pressure in Arteriosclerosis.—Rudolf (Am. Jour. of the Med. Sos., Sept., 1908) says in man cases of even well-marked arteriosclerosis the blood pressure is not raised. This may be because the disease is localized to a part of the arterial tree, or because the heart may at least be giving up the struggle and hence the pressure, once high, has now fallen. In man cases of arteriosclrerosis, in wihch the pressure is found to be raised, it cannot be assumed that the pressure is high because of the disease of the vessel walls, nor yet that the calerosis is due to the increased pressure. For example, the arterial stiffening may be due to syphilis, and the hyperpyesis to some intercurrent condition of nervous or toxic nature which may be more or less removable by appropriate treatment.

Gelatine Enemas in Hemorrhages from Typhoid Ulcers.—Michaelis (Med. klink., No. 2, 1908) details some excellent results from the use of gelatine in typhoid hemorrhages, 250 to 500 c.c. of a five per cent gelatine solution, at a temperature of 48 deg. C., are injected into the bowel pressure three to four times daily.

Abnormal Motility of the Stomach a Valuable Factor in the Diagnosis of Gastric Lesions.—Barker's (Medical Record, Sept. 12, 1908) paper deals only with those findings revealed by an examination of the stomach contents, due either directly or indirectly to an abnormal motility of the gastric walls, made long before the appearance of the familiar objective and subjective symptoms. He says

the gastric motility characterized by long-continued stagnation of food in the stomach, and the partial or complete absence of mucus in the gastric contents, are characteristic of cancer, and when such conditions prevail search for the Oppler-Boas bacillus should be made. If this is found the diagnosis of cancer is positive; if it is not found the patient should not be allowed to pass into the stage of the disease in which operative measures are futile, by waiting for this more positive element in the diagnosis before exploratory measures are taken. A large accommulation of mucus in the stomach is one of the most important elements in the diagnosis of chronic gastritis. This is due, in a large degree, to faulty contact between the ingested materials and the nerve centers in the stomach walls causing gastric immotility, which, in turn, prevents the escape of the accumulated mucus into the intestines. The viscous circle being thus formed is broken up in certain cases by long-continued lavage; hence one of the beneficial effects of this treatment in chronic gastritis. A prominent factor in the diagnosis of gastric ulcer is the exaggerated motility of the gastric walls. This is characterized by the absence of any portion of a test meal in the stomach a comparatively short time after its ingestion. Mucus is also almost, or entirely absent from the stomach in this condition, being digested as quickly as deposited in the stomach by the ever present over-acid secretion, and being expelled from the stomach quickly because of the exaggerated motility of the gastric walls.

A Simplification of the Jakoby—Solms Ricin Method for Pepsin Determination.—Enihorn (Med. Rec., Aug. 29, 1908) considers the ricin test the most practical of all methods for the approximate quantitative determination of pepsin. By means of a suitable constructed apparatus he not only simplifies the complicated Jakoby-Solms test, but reduces the time from three hours to one half hour. The apparatus consists of a cylindrical glass surrounded by a vacuum. This glass tube contains a frame holding twelve graduated pepsin tubes. The whole apparatus can be filled with water and corked. Each pepsin tube is marked with a different letter and shows a mark at 2 c.c., 3 c.c. and 3.5c.c. The lower part is furthermore graduated into millimeters. Thus we may dispense with pipettes and measuring glasses. The test is made as follows: Fill each pepsin tube up to 2 c.c. with 1 per cent ricin solution, then add up to the 3c.c. mark filtered and diluted stomach contents, and finally add decinormal hydrochloric acid solution up to 3.5 c.c. The tube is well corked, shaken up thoroughly, and then placed into the frame. The letters on the tubes identify the various dilutions. The vacuum tube is filled with fairly hot water (50 deg. to 60 deg. C.), the frame with pepsin tubes is placed in it, then the apparatus is corked and allowed to stand for half an hour. Observations are taken of the time at which the deposit in the various tubes disappear and are noted. After thirty minutes the amount of precipitate left in any of the tubes is recorded. Normally, the precipitate disappears in a dilution of 10 or 20. If a precipitate is present at 10 the pepsin is diminished, if it disappears at 10 the pepsin is increased. In achylia or marked subacidity the filtrate is used undiluted or only slightly diluted (2 to 5 times).

The Clinical Value of Ammonia Estimation in Diabetes.—Hewes and Adler (Boston Medical and Surgical Jour., May 7, 1908) deduct the following conclusions: 1. Quantities of ammonia reaching 5 gm. in 24 hours indicate an extremely severe form of diabetes, which usually proves fatal within a year. 2. Patients under 40 years of age tolerate an acidosis estimated in terms of 4 to 5 gm. ammonia far better than those above 50 years tolerate an acidosis of 2.5 to 4 gm. Ammonia. An acidosis in an individual above 50 years of age is of very serious prognostic import 3. A knowledge of ammonia excretion usally helps in the treatment of a case of diabetes, and generally, but not always gives warning of impending danger. 4. The value of a knowledge of the ammonia excretion in the prognosis of a diabetic patient is enhanced by a knowledge of the quantity of albumin and carbohydrate in the diet. 5. A lowering of the carbohydrate intake in a severe case of diabetes from a total of 80 gm. to 55 gm. in 24 hours produces little effect upon the acidosis.

Leucocytes in Diphtheria Before and After the Administration of Antitoxin.—Karsner (University of Penn. Medical Bull., Sept., 1908) bases the following remarks on a study of 13 cases of clinically undoubted diphtheria: 1. Diphtheria is accompanied by a varying degree of hyperleucoctyosis, usually moderate. Occasionally hyperleucocytosis may be absent in extremely toxic or extremely mild cases. 2. The differential counts in the leucocytosis of diphtheria show proportions of polymorphonuclear and mononuclear cells consistent with the grade of leucocytosis. In these leucocytoses the eosinophiles are present in unsually small numbers, and the myelocytes, basophiles in moderately small numbers. 3. Neither the degree of leucocytosis nor the proportions of any of its constituent

types of cells indicates, except within every broad lines, the severity of the infection or the outcome of the disease. 4. The administration of antitoxin has no appreciable effect on the degree of leucocytosis, the proportion of consistituent types of cells, or the staining reactions of these cells in dry preparations, stained either by Wright's method, Ehrlich's triacid mixture, or hematoxylin and eosin.

OTOLOGY.

A. F. KOETTER, M. D.

Histological Findings on the Ossicles in Non-Tubercular Chronic Suppuration.—Scholtz, Heidelberg (Zeitschrift fuer Ohrenheilkunde) examined the ossicles gained by malleus incus extraction in fifty-three cases, also some removed in radical operation, as well as in six cases of acute otitis. In the latter cases there was found infiltration of the medullary spaces, superficial carious erosions and also total necrosis. It is rather remarkable that in only a few cases severe progressive bone disease was found, but in majority of cases a beginning, almost complete or complete healing was found. This observation has been verified by Brieger and others. A necrosis of considerable extent was found in only two cases, once in an exacerbation of a chronic otitis combined with desquamation, the other case as the result of a chromic acid cautery done six days previous. Twice sequestrium was found in epidermized ossicles, a caries characterized by osteoblasts in three cases. More often there was found evidence of an inflammation of the medullary tissue usually in form of lymphom-like prefined collection of round cells around the vessels of the medullary spaces. The healing process could be watched in the different phases: change of the granulation tissue, interlined with round cells, into scar tissue, appearance of osteoblasts, formation of osteoid tissue on the lacunar arroded margins of the bone, new formation of bone, and finally covering of the surface with epithelium. Participating in the healing in a remarkable manner is the cartilaginous layer (rich in lime) of the articular surface. In five cases the result of the inflammation was a true ankylosis, but it was difficult to decide whether the inflammatory focus was in the articulation, or if the changes in the articulation were caused by disease of the neighboring medullary spaces. From the findings in confirmation of the reports of Breiger and Siebenmann, it is demonstrated that in so-called caries of the ossicles we are dealing with a relatively benign process, it is therefore not so much the removal of the diseased focus on the ossicles, as the creation of a better drainage and easier access, is the determining factor which causes the healing after malleus incus extraction.

Diagnosis of Otitis Media in Children.—(S. Blum, San Francisco, Cal., State Jour. of Medicine.)—In absence of other symptoms diagnosis may be made by pressure pain, brought about when the finger is placed in the fold formed by the inferior maxilla and the sterno-cleido mastoid, and pressing upward and inward against the external auditory canal.

Treatment of Acute Middle Ear Suppuration with Nipple-like Perforation by Suction of Pus from Tympanic Cavity through External Canal.—Muck (Zeitschrift fuer Ohrenheilkunde) treated five cases with pronounced nipple-like perforation (subacute stage), not in the usual manner, with dilatation of the perforation and counter opening, or, by removal of the nipple, but entirely by suction of the inflamed tympanic mucous membrane through external canal. The cases all healed in the course of a week. According to Muck intermittent suction is necessary, viz., aspirate five to ten times at each sitting, to stop when exudate becomes bloody. After the removal of a part of the inflammatory fluid from the tympanic cavity, the resorptive action of the hyperemia, caused by the suction, is a factor in healing. Muck could prove by his cases that the opening was not blocked by the suction, and he demonstrated on a phantom that the evacuation of the fluid from the tympanic cavity is physically possible.

Pathological Anatomy of the Ear in Hereditary Syphilis.—(Asai, Kioto.)—The examinations of the author extend over twenty temporal bones of fourteen foeti, respectively children up to two months after birth, and showed the following important results: In the middle ear usually vessel dilatation and small cell infiltration, besides six times, viz., in 30 per cent a true middle ear inflammation, almost as often as in the non-spyhilitic ear. In the labyrinth the nerve elements were uniformly normal, with the exception of one case in which, very likely following a fetal meningitis, small cell infiltration and connective tissue cells were found between the ganglionic cells. Hemorrhages were found in seven temporal bones. Vessel walls showed nowhere any luetic changes. In 25 per cent of the cases the temporal bone showed less development than was to be expected for the corresponding period of gestation, with the

exception of this condition, the examinations were without results, and this is in accord with the clinical experience, the hereditary syphilitic affections of the ear are rare, or occur usually at the end of the first decade, or even later.

Relation of Syphilis to Ozena.—(Frese, Hall, Archive for Laryngology.)—In 61 ozena cases author could prove with certainty hereditary syphilis as the etiological factor in 26.2 per cent, in a few cases other acute infections diseases. Frese sees the action of the hereditary lues in a direct local injury of the nasal mucous membrane through the syphilitic virus which in early youth lays the foundation for the perhaps gradual progressive atrophy.

THERAPEUTICS.

Treatment of Influenza in Children.—Louis Fischer, in Pediatrics, lays down the following canons of treatment in this epidemic: Hygienic Treatment.—Every sick child demands fresh air. This does not mean that a child or an infant with subnormal vitality with a system already depressed from profound toxemia and cyanotic, should be exposed to cold winds and rigid blasts. The depressed heart action requires oxygen without the dangerous chilling of the surface of the body. The nervous system, already sensitive from the disturbance due to the toxins, is not in a condition to tolerate sudden changes These sudden changes of temperature from a warm room to a cold wind have the same effect in some cases as the profound shock frequently seen during the course of an anesthetic. This latter shock is produced by fear and the same holds good when the system is needlessly exposed. Place the child in a well-ventilated room having a temperature changing from 68 to 72 deg. F.; such temperature is well borne and stimulates the circulation of the blood rather than interferes with convalescence.

General Plan of Treatment.—The elimination of stagnant particles of food will remove fermenting and decomposed food. Its effect will also be apparent on the fall in the temperature. Rhubarb and soda mixture in teaspoonful doses is indicated, and should be repeated every hour for three or four doses, aided by warm colonic flushings. This will do good. Water should be given in large quantities to cleanse the gastro-enteric tract and also to aid diuresis, and for its antithermic effect.

Antipyretics should not be given, because they cannot eliminate the poison and because they depress the heart action and stifle the symptoms for the time being, without any ultimate benefit. Sponging the body with cool water or by evaporating lotions, such as alcohol and water, may do good and are very comforting to the patient. A tepid bath at temperature of 85 to 90 deg. F., or several minutes in the evening will soothe the infant and frequently induce sleep. Do not disturb the infant if asleep. Harm is done by disturbing the infant. To aid nature in restoring health, rest, and therefore sleep, is of prime importance. Five or six hours of sleep will frequently refresh the infant and restore its appetite, hence stress should be laid on this important point.

Feeding.—During an acute infectious disease, digestion is subnormal, hence we must adapt the food to the capacity for digestion and assimilation. Instead of whole milk, whey should be given for several days until normal conditions prevail. In a breast-fed infant the milk should be pumped off and diluted with an equal quantity of sweetened ice water. The interval of feeding should also be prolonged, and instead of feeding once every three hours, the interval should be prolonged to four hours. In like manner, instead of eight ounces at one meal, the quantity should be reduced to four ounces.

The proximity of the Eustachian tube to the pharynx, and the ease with which an infection can extend into the middle ear, should be remembered. Restorative treatment in which cod-liver oil and, especially, small doses of strychnine form a part are worth remembering. The danger of re-infection must be considered.—Med Standard, Feb., 1908.

The X-Ray Treatment of Exophthalmic Goitre.—(C. Thurston Holland, M.R., C.S., etc, Archives of the Roentgen Ray, July, 1908.)—As a result of the treatment and careful observation of 20 cases of exophthalmic goitre, Holland has noted the following points: 1. In nearly all the patients there was an immediate drop in the pulse-rate following upon the first three or four exposures, and this, in some of the cases, was very noticeable. Further, the pulse-rate remained reduced. 2 The muscular tremors, and general nervousness also, almost always showed signs of improvement from the first and continued to improve during the course of the treatment. In two of the cases the pulse became normal and the tremors, etc., quite disappeared. 3. The circumference of the neck, taken over the most prominent part of the gland, in some cases diminished notably, while in others no diminution in size occurred. Perhaps what was more noticed was that in cases where the gland was tense and hard, and where there was throbbing, almost

always after a few exposures the gland became softer and less tense and the throbbing diminished. 4. The exophthalmos was not materially altered in any of the cases where it was a marked feature. The author's description of the techniques employed is very unsatisfactory for the reason that he fails to mention the strength of current, type of apparatus, vacuum and many other important points. To avoid raidodermatitis the ray was filtered through two layers of thick boiler felt. The exposures were of 10 minutes' duration on alternate sides of the neck, two or three times weekly, according to the effects noted. Attention is called to the possible dangers of over-treatment, and mention is made of a case treated by Dr. Bruce where about 120 exposures were given in one year and which were followed by symptoms suggestive of myxedema. The author considers the findings of the Mayo brothers as being interesting. These excellent observers began experimenting with the X-ray treatment of exophthalmic goitre in 1903. They had noted, in operating upon cases of cervical adenitis which had been exposed many times to the ray that the lymph system was greatly sclerosed. Acting upon this hint, they tried its effect upon exophthalmic goiter. They were unable to produce a cure, but reported great benefit, especially as regards the amelioration of the general nervousness, the muscular tremors, the tachycardia and, lastly, the exophthalmus. They further add that the benefit was sufficient to give this method a place in the treatment of Graves' disease, or, at any rate, to make it a preparatory treatment to a prospective surgical operation at a later period.—Med. Rev. of Revs.

"Mercury as a Specific."—The editor of the Medical Council, in the August, 1908, issue of that journal, gives us an interesting article under the above caption. The history of mercury, and with it that of syphilis, can be traced back to the remotest time. In all the ages its remedial value has been recognized, and the history of medicine can not be written independent of the history of mercury. Indeed, the history of the mercurials in therapeutics constitutes the major portion of the history of the remedial art prior to the advent of bacteriology and antiseptics. The hottest scientific wars have been waged over mercury, and by means of these age-long contentions, or in spite of them, it came to be regarded as practically specific in syphilis. How did it act? We did not know then, but we called it an alterative and all we knew of its specific value, up to less than fifty years ago, was that it expends itself through the glands of the body, whereas syphilis acts through them. Now we know that its specific effect is best exemplified in phagacytosis, but any doctor, who has observed the melting away of syphilomata under simple mercury ointment, also knows that other and more subtle powers remain to be accounted for. This latter problem is now being satisfactorily worked out in the laboratory, for the isolation of the treponema pallida, in 1905, as the cause of syphilis, has made this possible. In the Pasteur Institute, of Paris, it has recently been ascertained that calomel, in the proportion of one part to two parts of lanolin, will invariably destroy the virulency of an inoculation of syphilis in monkeys, provided the application is made within twelve to eighteen hours after insertion of the virus. This suggests the prophylactic treatment of chancre and suspected infection with specific mercury and, further more, as it shows germicidal powers, it argues for the general employment of mercury on every accessible lesion.

THE students of Dr. Byron Robinson are erecting a bronze bust to him. The affair is in the hands of Dr. Benjamin Orndoff, 2277 Wilcox avenue, Chicago, Ill.

THE great ocean liner rolled and pitched. "Henry," faltered the young bride, "do you still love me?" "More than ever, darling," was Henry's fervent answer. Then there was an eloquent silence. "Henry," she gasped, turning her pale, ghastly face away, "I thought that would make me feel better, but it doesn't."

HISTORIC DRUGS.—Dr. Gowers, treating of "Historic Drugs," says: "We disinfect our rooms with burning sulphur; and so men did before the time of Homer. We purge sometimes with rhubarb, especially when some subsequently astringent influence is desirable, and so did the old Arabians for the same reason. The value of castor oil in its chief use was familiar, probably for ages, to the natives of the East and of the West Indies before it was made known in Europe by a physician from Antigua 150 years ago. Aloes was employed in the same way long before the time of Dioscorides and Pliny. The knowledge of the influence of ergot in parturition we owe to the peasants of Germany, and the use of male fern for tape-worm goes back to the old Greeks and Romans. The employment of mercury in syphilis by inunction and fumigation, which our nineteenth century therapeutics regard with such satisfaction, seems to go back to the time of the crusades and it is said that its use can be traced in Malabar as far back as the ninth cenntury. —Health.

BYRON ROBINSON'S NOTE BOOK.

Years ago, from the multiple useful functions of the great omentum I called it the "policeman of the belly." A recent post mortem of a man dead from typhoid perforation presents the maximum utility of the great omentum. After the typhoid perforation in the distal ileum a surgeon had attempted to suture the enteronic aperture, but the intestinal aperture was greater than ever from sepsis and he died from septic peritonitis. But, wonders! I began to examine the ileum some distance proximalward where I found another enteronic perforation from typhoid ulceration which was completely, perfectly closed, plugged by an omental roll which was suspended for an inch in the enteronic lumen. In this subject the omentum successfully closed an enteronic perforation where a surgeon failed. Great is the functional power of the "policeman of the belly." I have observed that it would close perforations of the stomach, diaphragm, enteron, hernial apertures, circumscribe infectious foci and like a man-of-war, is always ready (unless unfitted by fixation from previous omentitis) to sail to some infectious port for prophylaxis.

The principal factor in the causation of fixation of the uterus is the peritoneal perigenital adhesions. The uterus may also be fixed as regards the relative position of the body and cervix, by inflammation of its own tissues, myometritis.—Dr. Lucy Waite.

The great problem of any age is distribution—distribution of medical knowledge and skill; distribution of views, ideas; distribution of wealth, money; distribution of land, property; distribution of thought, thinking. The sucess of a newspaper, of a medical journal is its capacity to distribute its thoughts as the farmer distributes his seed to multiply in growth. The unethical doctor advertises which he knows is, however false, distribution. The Hearst newspapers are an excellent example of multiplying and increasing the news thought to the people—the Hearst editorials, read by millions of people, are a great event of today. White and gray matter, of course, produce those interesting and instructive editorials. The daily distribution of such useful and grand editorials as those of the Hearst papers forces thinking in tens of thousands of people who do not take kindly to mental processes.

Deeply enplanted in the heart of man is the spirit of progress.

Medical progress consists in alleviating suffering and prolonging life. The chief factor in medical progress is prophylaxis.

MEDICAL MISCELLANY

A permit was issued September 15, in Kansas City, Kas., to St. Margaret's Hopsital to build a four-story addition to its main building. The improvement will cost $50,000 and should be finished by December 15.

Dr. William P. Spratling, superintendent of the Craig Colony for Epileptics at Sonyea, N. Y., has resigned, to take effect next November. Dr. Spratling is to accept the chair of nervous diseases and physiology in the College of Physicians and Surgeons at Baltimore.

The contract for the building of the new hospital for tuberculosis on the grounds of the Cook County Hospital, Chicago, has been awarded for $220,900 to the lowest bidder. The new building will be five stories in height 162 feet long, with three wings, each 128 feet long, and will accommodate 320 patients.

The New Orleans Parish Medical Society adhered to its policy of not admitting women to membership when the application of Drs. Cora and Elizabeth Bass was presented at the meeting. Only five votes are necessary under the by-laws of the society for the denial of an application, and it is stated that more than its decisive vote was polled.

Orsa, in Sweden, has, in course of a generation, sold $5,000,000 worth of trees, and by means of judicious replanting has provided for a similar income every thirty or forty years. In consequence of this commecrial wealth there are no taxes. Railways, telephones, etc., are free, and so are schoolhouses, teaching, and many other things.

A gift of $24,000 has been given by the Emperor of Germany towards the proposed institution at Berlin, to be called the Robert Koch Foundation for investigations in tuberculosis. This amount completes the $100,000 which was stipulated must be subscribed before Andrew Carnegie's promise of $100,000 for the same purpose would be available.

A New Remedy in Pertusis.—After having tried many drugs without avail, W. Kaupe has seen very good results in the treatment of whooping-cough only after using a dialyzed preparation made from Herba thymi and pinguicuae In about 60 cases this remedy failed in only 2 or 3. In some cases the effect was almost immediate. The dose is as follows: For children under five years, 1 drop in a tablespoonful of water, morning and evening, increased to 2 to 3 drops. Children over five years receive 2 drops, increased to 3 to 5.—Muench. med. Woch., July 7, 1908.

PERTUSSIS HOSPITALS.—It is a surprising thing that it has remained for this day to agitate the question of pertussis hospitals. A disease of so trying a character and fatal in so great a percentage of cases could be much more satisfactorily handled in a hospital, and there are few parents who would not gladly avail themselves of such an institution. The editor of Archives of Pediatrics argues for such an institution in all larger cities. It is a project worthy of support.

SOMETHING BURNING.—Evidently the tobacco of three hundred years ago was not quite up to present-day standards of mildness and fragrance. Or if so, King James I of England was unaccountably prejudiced against its use. His literary output was as extensive as that of our leading Indiana novelists and in one of his productions the "Counterblaste to Tobacco," he spoke of smoking as "a custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs, and in the black stinking fumes thereof nearest resembling the horrible Stygian smoke of the pit that is bottomless."

LOCAL TREATMENT OF ERYSIPELAS.—Dr. Roswell Park says: "Of all the numerous applications which I have ever tried, I have found but one thing which has given the universal satisfaction afforded by the following prescription or something equal to it. Resorcin (or naphthalin), five; ichthyol, five; mercurial ointment, forty; lanolin, fifty. The proportions of these ingredients may be varied, and I often increase the amount of ichthyol, especially when the skin to which it is to be applied is not too tender. The affected parts are anointed with this, and then covered with oiled silk or some impermeable material, simply to prevent its absorption by the dressings; the parts are then enveloped in light dressings and bandaged. Whenever I have to deal with local evidences of septic infection, I use an ointment essentially the same as this and have learned to count on it with more reliance than anything that I have ever resorted to. This one better thing hinted at above is Crede's silver ointment, which is to be used as described above. As the disease becomes mitigated the ointment may, if desirable, be reduced with simple lard, and may be discontinued when local signs have disappeared. Absorption of any of these preparations may be hastened by a series of scratches over the affected area with the sharp point of a knife, not deep enough to draw blood, but deep enough to better expose the absorbent vessels of the skin.—Health.

THE EXPLOSION OF THE THEORY OF HEREDITY.—A. Lapthorn Smith notes in the Boston Medical and Surgical Journal, that while the idea of heredity in tuberculosis has undergone in the mind of the public a wonderful and beneficent change, the views along this line as regards cancer and insanity have remained almost where they were one or two centuries ago. In regard to the increase of cancer, the author says that he believes it due to the terrible mistake of regarding it as hereditary and unpreventable, where as it is highly contagious. He finds it quite the exception to find anything hereditary about it. He believes it to be due to an ameba which gains access to the system through either the alimentary canal or some abrasion. It may circulate in the blood for indefinite time and finally find lodgment on some weakened area. To attack this enemy nature causes a cell proliferation in the vicinity and this proliferation becomes hard, due to a calcareous secretion from the ameba itself. We have considered as the disease itself, the manifestation which nature makes to stop the disease. This cell mass may gradually crumble before the assaults of the enemy and begin to ulcerate. Because cancer is considered hereditary and not contagious, no means are taken to stamp it out. It is therefore on the increase, while tuberculosis is on the decrease. In the beginning it is an absolutely local disease and should be removed at the earliest possible moment after its presence is suspected. A similar line of reasoning is followed with reference to insanity. The development of the latter affection is largely a matter of environment and habits of life. It is not logical to say that a malady is hereditary simply because it happened to a parent as well as to a child. The same laissez faire plan has been followed with reference to insanity as to cancer. The same idea holds true as to drunkenness. This also has been considered as hereditary, but the author is convinced that it is simply a matter of inanition. He says he knows of several families where the father was a confirmed drunkard long before the children were born, and yet not one of those children care for alcohol; in fact, they loathe it. These children were for the most part educated away from home. In another family, where the father only took to drink after all the children were born, the five boys were brought up with the constant example of a drinking father before them, and four out of the five have become drunkards. If drunkenness was recognized as contagious instead of hereditary many a family might be saved from this disease, either by isolating the drunken father or by sending the children away when practicable. —Med. Rec.

THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scentific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

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CLINICAL THERAPEUTICS

A forum of original experience, to which scientific contributions are invited. Responsibility for views promulgated imited to author.

CATARRHAL JAUNDICE.

JAMES BURKE, M. D.

MANITOWOC, WIS.

THIS condition implies that a source of irritation exists in the general circulation, an autogenetic toxin whose biochemic affinity is most readily satisfied by the affinitive cognate resident in the nervous mechanism of the liver. The biochemic attack on the nerve structures of the liver is the biologic process by which the affinitive cognate in the nerve structure is sought to be isolated for the convenient saturation of the affinities of the disturbing toxin.

The irritation is provocative of a train of symptoms and metabolic changes, that it is impossible to prognose; but in every case the result of the initial attack is the stimulation of the epithelial and glandular cells to more profuse and changed secretion; the biochemic construction of these hyperfunctionating cells, after a time loses the normal arrangement of its ultimate elements, which determines more or less prolonged abnormal function. This stage of abnormality is very favorable for infection of the gall passages, by one or more of the varieties of bacteria that infect the alimentary canal; the activity of the infection depends on the ease with which the abnormal secretion of the cells yield its elements to the promotion of bacterial growth; if the excessive secretion is only partly converted into bacterial life, the remainder tends to fill up the limited space left in the ducts of exit for the gall, from the swollen lymphoid tissues of the common duct; this temporary damming of the bile is the process by which catarrhal jaundice is generally brought about.

One of the problems, in the treatment, to be solved, is to determine the initial toxin or toxins of the case; as every person is prone to develop his own peculiar toxin, on relatively slight provocation—old nomenclature termed it diathesis, this should be considered at the outset; next the person's habits of life, including daily occupation, manner of eating and character of food, hours devoted to recuperation of the life forces, venery, workings of the mind and the moral status.

It is essential that the development and exercise of the physical, the mental and the moral attributes of man shall be fairly symmetrical. In the greater number of cases, the primary fault lies in the over-feeding with nitrogenous food; the excess of proteid over-taxes the digestive organs, resulting often in a temporary incapacity of the digestive ferments to revert and synthesize the proteid into homologous protein. In that case much of the protein is of the hybrid variety and a greater portion is of the heterologous variety of protein.

The three varieties of protein gain access to the general circulation; much of the heterologous protein is conveyed through the portal circulation to the liver for further biologic elaboration; while what is directly absorbed into the general circulation is taken in hand by the immunizing faculty of the body, in the effort to revert and synthetize it into regenerative cell pabulum; this is vicarious work for both the liver and the immunizing faculty of the body. The robust constitution which can and does tolerate this abnormality for a long time, is laying up a store of future potential poisoning; the catarrhal jaundice may be the first indication of the poisonous potentiality.

The stored up excess of the heterologous protein, left over after the vicarious action of the liver and the immunizing faculty are temporarily exhausted, is at some subsequent time—and often at an inopportune time—when a grave bacterial invasion is on in the system—resolved out of the tissues back into the blood stream, where a variety of biochemic affinities are met and formed.

The immunizing faculty being now in abeyance, the abnormal evolution of proteid waste must assume the lines of least resistance in becoming normal incitants for the excretory organs with re-establishment of excretion its own elimination.

In the dilemma of disease, the saving quality of the loss of appetite curtails the source of supply of the, now, dangerous proteid pabulum and allows the racked bodily tissues an interval in which to transmute autogetic toxins. The utility of the doctor consists in his aid to the sick tissues, in economically disposing of the different phases of the abnormal evolution of the proteid waste (toxins).

Symptoms point out the dominant disturbing toxin, from time to time; every toxin has its affinitive cognate substance, derived from the vegetable kingdom; the latter given in small, frequently repeated doses, till the symptoms begin to disappear, does the therapeutic feat by the mutual neutralization of the biochemic affinities of both principles. In the treatment of a toxic condition of the liver, a surplus of one of the less permanent salts of sodium, as the succinate of sodium, is useful in allowing the resumption of the normal content of the bile salts.

Emetine, boldine and dioscorein to neutralize affinitive disturbing toxins.

Contribution to the Treatment of Bronchopneumonic Catarrh.— (Dr. A. Ferrata and A. Golonelli, Medical Clinic of the University, Parma, Gazzetta Internazionale di Medizina, 1908, No. 14, p. 159.)—The authors report upon the results of styracol therapy in bronchopneumonic affections which were observed in the clinic of the University of Parma during three years. Though it may be disputed whether guaiacol preparations are really beneficial in specific pneumonic affection, it can be stated, on the other hand with certainty, that styracol, which is also a guaicaol preparation, shows a decided influence upon the mucous membranes of the bronchi. After the use of styracol, the night-sweats will be less annoying and the fever will drop. An influence upon the bronchi is also manifest in that the expectoration will lessen in amount and will become thinner. Many patients experience considerable relief of their cough and the general condition will improve remarkably. Styracol was also used with good results in various intestinal affections. The authors recommend styracol particularly owing to its effect upon the severity of the bronchial catarrh and its antipyretic action.

THE November St. Nicholas will have the first chapters of Ralph Henry Barbour's new story, "Captain Chub," carrying on the fun and adventures of Roy, Dick, Harry, and Chub, whose experiences have been told in "The Crimson Sweater," "Tom, Dick, and Harriet," and "Harry's Island."

FOR three months the Tuberculosis Annex to the Louisville City Hospital has been finished and ready for the reception of patients; but it has not yet been opened because the appropriation for the City Hospital for the fiscal year has not been sufficient to warrant the necessary expense in the care of the patients.

A PLAGUE CONFERENCE ON THE PACIFIC COAST.—Invitations have been issued by Dr. Spiro Sargentich, Health Commissioner of Tacoma, Wash., to all the health officers of the Pacific Coast cities to attend a conference in Tacoma for a discussion of the bubonic plague and of the means for combating it. A number of physicians of the coast cities as well as the health officers have signified their desire to attend the conference. It is believed the conference will result in the boards of health in all coast cities uniting in a vigorous campaign against rats, and will recommend the adoption of more stringent sanitary measures.

WATER ABSORBENT PETROLATUM.—According to a patent granted to Dr. Lipschütz, the hygroscopic properties of petrolatum can be greatly increased by previously oxidizing with salts of chromic, permanganic or chloric acid. The oxidation is effected by boiling 100 parts of petrolatum with 50 parts of a 5 per cent chlorate solution, or an equivalent quantity of a solution of a permanganate or chromate to which the calculated quantity of suplhuric acid has been added. When the greater part of the water has been evaporated and the chlorous fumes appear, 25 parts of water are added, and the boiling continued. The operation is repeated until the petrolatum will take up three times its weight of water. The acid liquid is then removed and the vaseline washed. Mixtures of the product with water are yellow in color, and are adapted to the preparation of ointments.